Hal Zenick From: Hal Zenick To:

Subject: Fw: Dispersant causes more harm than good in oil spill cleanups -- study

Date: 12/07/2012 11:23 AM

Attachments: ORD Review of Rico Martinez et al 2012.docx

Sent by EPA Wireless E-Mail Services

▼ Mace Barron

---- Original Message -----

From: Mace Barron

Sent: 12/07/2012 09:57 AM CST

To: Robert Kavlock

Cc: David Dix; Elizabeth Blackburn; Rick Greene; Robert Kavlock; Megan

Maquire; David Piantanida; Hal Zenick; Michael Hemmer; Albert Venosa

Subject: Re: Dispersant causes more harm than good in oil spill cleanups

-- study

Bob, attached are comments on the Rico-Martinez rotifer paper; please let us know if vou need anything else on this.

Given the hundreds of studies conducted on the DWH spill, dispersants and oil, we anticipate there will be a substantial number of studies relating to dispersants that will be of potential concern to EPA (ie, this may be tip of iceberg).



sincerely, Mace



▼ Robert Kavlock---12/03/2012 09:17:51 PM---From: Robert Kavlock/DC/USEPA/US To: Elizabeth Blackburn/DC/USEPA/US@EPA

From: Robert Kavlock/DC/USEPA/US

To: Elizabeth Blackburn/DC/USEPA/US@EPA

"Rick Greene" < Greene. Rick@epamail.epa.gov >, "Branch Chief Mace

Barron: <Barron.Mace@epamail.epa.gov>, "Robert Kavlock" <Kavlock.Robert@epamail.epa.gov>, "Hal Zenick" <zenick.hal@epa.gov>, "David Dix" <dix.david@epa.gov>, "Megan Maguire"

<maguire.megan@epa.gov>, "David Piantanida"

<piantanida.david@epa.gov>

Date: 12/03/2012 09:17 PM

Subject: Re: Dispersant causes more harm than good in oil spill cleanups --

study

Rick/Mace

Can you do a critique of the paper? Until we can evaluate it, we should stick to our talking points. As well, There is a PNAS paper coming out tomorrow that Lek shared this morning.

----Elizabeth Blackburn/DC/USEPA/US@EPA wrote: ----

To: "Rick Greene" <Greene.Rick@epamail.epa.gov>, "Branch Chief Mace Barron" <Barron.Mace@epamail.epa.gov>, "Robert Kavlock" <Kavlock.Robert@epamail.epa.gov>, "Hal Zenick" <zenick.hal@epa.gov>, "David Dix" <dix.david@epa.gov> From: Elizabeth Blackburn/DC/USEPA/US@EPA Date: 12/03/2012 08:16PM Cc: "Megan Maguire" <maguire.megan@epa.gov>, "David Piantanida" <piantanida.david@epa.gov> Subject: Dispersant causes more harm than good in oil spill cleanups -- study

Hi all

Apparently there were about 30 stories today about this study. In the event we get a question about it, any suggested response about how it might relate to the work we did? Or should we say that we're reviewing the study and then just reiterate what we found back in 2010?

Thanks

Liz

News Headline: Dispersant causes more harm than good in oil spill cleanups -- study \mid

News Date: 12/03/2012 Outlet Full Name: Greenwire

Contact Name:

News Text: After more than 2 million gallons of Corexit 9527A, an oil dispersant, was poured into the Gulf of Mexico to clean up BP PLC's toxic oil spill in 2010, a new study has found those very dispersants could be doing even more harm to microscopic organisms that live in the water.

The dispersant was used to break apart the oil and stop it from being swept to shore.

In one of the first examinations of how oil dispersant affected plankton, the study published in the journal Environmental Pollution found the combination of oil and the dispersant becomes 52 times more potent that oil alone.

"There is a synergistic interaction between crude oil and the dispersant that makes it more toxic," said Terry Snell, co-author of the report and a Georgia Institute of Technology biologist. The Corexit "makes it more toxic to the planktonic food chain."

The dispersant makes the oil droplets even smaller, which makes it "bio-available" to tiny organisms, said Florida State University researcher Ian MacDonald. "The effect is a specifically toxic synergy -- the sum is worse than the parts."

An August 2010 study by U.S. EPA determined the dispersant-oil combination isn't worse for shrimp, fish and other sealife than oil alone already is. Yet several studies have found the mixture is more detrimental to the embryos of some fish species (Douglas Main, NBC News, Nov. 30). -- HP Liz Blackburn

USEPA, Office of Research and Development 202-564-2192